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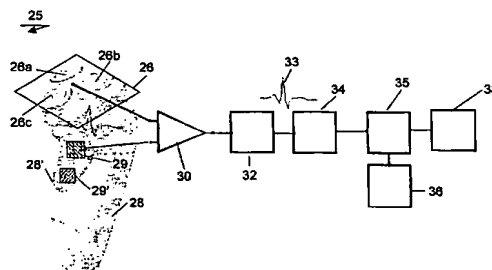
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(54) Title: A PORTABLE ELECTRONIC DEVICE AND A HEALTH MANAGEMENT SYSTEM ARRANGED FOR MONITORING A PHYSIOLOGICAL CONDITION OF AN INDIVIDUAL



(57) Abstract: The invention relates to a portable electronic device, like a shaver, a toothbrush, a walkman, a telephony unit, etc., said device being arranged to measure a signal representative of a physiological condition of a user during a conventional usage of said device. In an embodiment of the electric shaver (25), it is provided with a first contact surface (26) comprising a plurality of shaving heads (26a, 26b, 26c). The shaving heads are manufactured from an electrically conducting material, usually a metal and are suited to provide a good electrical contact to the individual's skin during shaving, thus constituting a first electrode. The second contact surface (28') is provided on the housing of the shaver, in particular on a grip portion (28) thereof, where a contact to a hand of the individual is enabled. The second contact surface (28') comprises a second electrode (29). Additionally, the second contact surface (28') can comprise a further sensor (29') arranged to provide additional data on the physiological condition of the user. The signal measured from the electrodes is supplied to the input of the amplifier (30), which is preferably a differential amplifier. The signal from the differential amplifier (30) is then supplied to a band-pass filter (32), which is preferably set for the range of 0,02 Hz to 100 Hz. The limited amplified biosignal (33) is then forwarded to the analogue-to-digital converter (34). The digitized signal is then analyzed by the analysis means (35), the results of the analysis, comprising the deduced health-related parameter is being displayed on a display (36) of the electric shaver. Additionally the health-related parameter and/or the raw data are transmitted to a remotely arranged unit by a built-in transmission means (38). Preferably, the transmission means (38) comprises a wire-less transmitter.



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